

BUYANOV, Aleksandr Fedorovich; ZAKHARCHENKO, P.I., inzh., laureat  
Stalinskoy premii, nauchnyy red.; POPOV, A.S., red.; SHADERINA,  
N.D., tekhn.red.

[Secrets of large molecules] Tainy bol'shikh molekul. Moskva,  
Izd-vo VTsSPS Profizdat, 1960. 107 p. (MIRA 14:2)  
(Macromolecular compounds)

ZAKHARCHENKO, P.I.; ZIL'VESTR, Ya.Ya.

Selecting a method of manufacturing vulcanization molds for tire casings. Kauch. i rez. 20 no. 4:25-27 Ap '61. (MIFA 14:5)

1. Gosudarstvennyy Komitet Soveta Ministrov SSSR po khimii.  
(Tires, Rubber)

ZAKHARCHENKO, P.I.

"Autoadhesion and adhesion of high polymers" by S.S. Volutskii.  
Reviewed by P.I. Zakharchenko. Kauch.i rez. 20 no.3:58-59 Nr '61.  
(MIRA :4:3)

(Polymers) (Adhesion)  
(Volutskii, S.S.)

BLOKH, Grigoriy Abramovich, prof.; ZAKHARCHENKO, P.I., red.  
ZITSER, A.I., red.

[Organic accelerators of rubber vulcanization] Organi-  
cheskie uskoriteli vulkanizatsii kauchukov. Moskva,  
Khimiia, 1964. 540 p. (MIRA 18:1)

1. Dnepropetrovskiy khimiko-tekhnologicheskii institut  
im. F.E.Dzerzhinskogo (for Blokh).

ACC NR: AP6017974

SOURCE CODE: UR/0413/66/000/010/0079/0079

INVENTORS: Gul', V. Ye.; Zakharchenko, P. I.; Belyatskaya, O. N.; Gorbatova, K. A.; Gorbachev, Yu. G.

ORG: none

TITLE: A method for obtaining a film-making material. Class 39, No. 101806

SOURCE: Izobretoniya, promyshlennyye obraztsy, tovarnyye znaki, no. 10, 1966, 79

TOPIC TAGS: hydrochloric acid, rubber, isoprene, polymer, sorbic acid

ABSTRACT: This Author Certificate presents a method for obtaining a film-making material by hydrochlorination of 1,4-cis-isoprene rubber. A modifier is introduced in the course of film making. To impart the preserving properties to the film and to increase its resistance to aging, sorbic acid is used as the modifier.

SUB CODE: 11/  
07/

SUBM DATE: 02Jan63

UDC: 678.474.3.046.9:62-416

Card 1/1

ZAKHARCHENKO, S., kand.biol.nauk

Hand drill for plant breeding plots. Nauka i persd.op. v sel'khoz.  
8 no.11:39 H '58. (MIRA 11:12)  
(Drill (Agricultural implement))

S/169/62/000/008/020/090  
E202/E192

AUTHORS: Balenko, V.G., and Zakharchenko, S.N.  
TITLE: Certain problems of comparing the methods of harmonic analysis of Earth tides

PERIODICAL: Referativnyy zhurnal, Geofizika, no.8, 1962, 21, abstract 8 A 143. (Tr. Poltavsk. gravimetr. observ. AN USSR, 10. 1961, 20-37).

TEXT: The problem of systematic error in harmonic constants of the tidal waves is discussed. This arises from incomplete elimination of the disturbance waves. The recording of the observed tides suffered due to the displacement of instrument zero and random errors, and it was not therefore possible to use it for solving this problem. In order to do so, a six-monthly theoretical curve of gravity force in tidal variations was calculated, which included 79 largest waves of the lunar-solar tide. The analysis of the results of processing the theoretical curve according to the methods of Dudson, Lekolyaze, Matveyev and Pertsev has shown that the smallest errors in harmonic constants were obtained with the method of Lekolyaze. Noticeable errors appearing in the remaining  
Card 1/2

Certain problems of comparing ...

S/169/62/000/008/020/09C  
E202/E192

methods in wave  $N_2$  are due to disregarding small waves with frequency close to the frequency of the  $N_2$  wave. All methods for the principal waves determined gave relative errors not greater than 1%. The problem of systematic disturbances introduced into the periodical part of the tidal ordinates by combinations stipulated by B.P. Pertsev in order to eliminate the zero shift are discussed (see Ref.zh. Geofiz. 1, 1960, 157). It was shown that: 1) longitudinally periodical waves are excluded together with the shift of zero sufficiently well; 2) as a result of incomplete attenuation of the tidal waves when the shift of zero is excluded, into the amplitudes of the determined waves is introduced a systematic error which for the waves  $N_2$  and  $O_1 < 1\%$ , for  $N_2 < 0.3\%$ , and for  $S_2$  and  $K_1 < 0.2\%$ ; 3) if the zero shift may be represented as a third degree polynomial over the 49-hours interval, then this will fully exclude the combination of ordinates as stipulated by B.P. Pertsev.

[Abstractor's note: Complete translation.]

Card 2/2



LESNITSKAYA, V.L. prof.; ZAKHARCHENKO, S.N. (Simferopol')

Penetrating craniocerebral gunshot wounds in children. Vop.  
neirokhir. 27 no.4:56-57 J1-Ag'63 (MIRA 17:2)

MATVEYEV, P.S.; ZAKHARCHENKO, S.N.

Reduction values for calculating grouped earth tidal waves for the  
years 1958 through 1967. Trudy Polt. grav. obser. 12:59-99 '63.  
(MIRA 16:9)

(Tides)

BALENKO, V.G.; ZAKHARCHENKO, S. N.

Some problems in comparing methods of harmonic analysis of  
earth tides. Trudy Folt. grav. obser. 10:20 37 '61.

(MIRA 14:10)

(Tides)

ZAKHARCHUK, S.S., kand. med. nauk (L'vov)

Experience with work in the organization of the detection of  
toxoplasmosis in pregnant women in L'vov Province. Sov. zdravo-  
okhr. 22 no.3:53-55 '63 (MIRA 17:1)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta okhrany  
materinstva i detstva (dir. - kand. med. nauk L.Ya.Davydov).

ZAKHARCHENKO, V., inzhener.

Granaries out of precast reinforced concrete. Sil'. bul. no. 6:  
7-9 8 '55. (MIRA 9:7)  
(Precast concrete construction) (Granaries)

PERVENTSEV, A., pisatel', ; MDIVANI, G., pisatel', ; KLEBANOV, S.;  
BL'SHTREM, A.; ROSTOTSKIY, S., rezhisser; SEGAL, Ya., rezhisser;  
BYSTRITSKAYA, L., aktrisa; USHAKOVA, V., aktrisa; PUGOVKIN, Mikh., akter;  
TIKHONOV, S., akter; ZAKHARCHENKO, V., akter; GINZBURG, V.,  
kino-operator; DUL'TSEV, V., kino-operator; SVETOLAROV, Ya., direktor  
kartin; MARON, V., direktor kartin.

We speak to you, radio amateurs! Radio no. 6:3 Je '58. (MIRA 11:7)  
(Radio--Receivers and reception)

ZAKHARCHENKO, V., inzh.; BUSLOVICH, G. [Buslovych, H.], inzh.

New-type farm buildings built without using wooden elements.  
S11'.bud. 9 no.7:10-11 J1 '59. (MIRA 12:9)  
(Mykil'ska Borshchahivka--Dairy barns)

ZAKHARCHENKO, V., inzh.

Standard plans for buildings for storing grain. 311'. bud.  
12 no.8:11-12 Ag '62. (MIRA 15:9)  
(Grain--Storage)



1. ZAKHARCHENKO, V.
2. USSR(600)
4. Inland Navigation
7. Great waterway. Eng. Tekh. molod. 20 no. 10, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

ZAKHARCHENKO, V.

K moriu Chernomu (Toward the Black Sea).

Ris. A. Pobedinskogo Skhemy A. Katkovskogo.

Moskva, Detgiz, 1953. 96 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 5, August 1954

1. DORONKOV, A., ZAKHARCHENKO, V.
2. USSR (600)
4. Main Turkmen Canal
7. At the threshold of the land of the future. Tekh. molod. 21, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

ZAKHARCHENKO, V.

Siberia, a treasury of water power. Tr. from the Russian. p. 19.  
ELEKTROENERGIJA. Vol. 7, no. 9, Sept. 1956  
Sofia, Bulgaria.

SOURCE: East European Accessions List, (EEAL) Library of  
Congress, Vol. 6, No. 1, January 1957

AUTHOR: Zakharchenko, V., Special Correspondent SOV/29-58-8-17/23  
TITLE: Pictures of the Exhibition (Kartinki s vystavki)  
PERIODICAL: Tekhnika molodezhi, 1958, Nr 8, pp. 28-31 (USSR)  
ABSTRACT: This is a collection of photographs taken at the Brussels International World Exhibition 1958. The photos were taken for the periodical "Tekhnika molodezhi" by special correspondent V. Zakharchenko. There are 14 figures.

1. Pictures

Card 1/1

ZAKHARCHENKO, Vas.

Photographic staging at the Brussels World Fair. Sov. foto 19 no.2:62-65  
F '59. (MIRA 12:3)

(Brussels--Photography--Exhibitions)

ZAKHARCHENKO, V., inzh.; KHANTSIN, A. [Khantsyn, A.], inzh.

Ventilation of livestock buildings. Sil'. bud. 12 no. 517-9  
My '62. (MIRA 16:4)

(Farm buildings—Heating and ventilation)

TSYBUL'SKIY, Ye.; KOMISSAROV, V., polkovnik; ZAKHARCHENKO, V., leytenant;  
KOVAL', A., kapitan

Let's encourage creative group participation. Komm.Vooruzh.Sil  
2 no.6:40-45 Mr '62. (MIRA 15:3)

1. Zaveduyushchiy sektorom obozonno-massovoy raboty Tsentral'nogo komiteta Vsesoyuznogo Ieninskogo kommunisticheskogo soyuza molodezhi (for Tsybul'skiy). 2. Starshiy instruktor redaktsii zhurnala "Kommunist Vooruzhennykh Sil" (for Koval').  
(Communist Youth League) (Russia--Armed forces--Political activity)



ZAKHARCHENKO, V., inzh.

Design details of buildings for keeping swine. Bud.mat.i konstr.  
4 no.4:42-45 JI-Ag '62. (MIRA 15:8)  
(Swine houses and equipment) (Precast concrete construction)

ZAKHARCHENKO, V., inzh.

Auxiliary structures on cattle farm. Sil'. bud. 11 no.9:11-14  
S '61. (MIRA 14:11)

(Farm buildings)

ZAKHARCHENKO, V.

Annals of the century. Sov.foto 21 no.10:2-9 0 '61. (MIRA 14:10)  
(Photography--Exhibitions)

ZAKHARCHENKO, V.

Sign of our times ("The awakened East; notes of Soviet newspapermen  
on N.S.Khrushchev's visit to India, Burma, Indonesia, and Afghanistan"  
by A. Adzhubei and others. Reviewed by V. Zakharchenko). (MIRA 14:8)  
Komm.Vooruzh.Sil 1 no.3:86-90 F '61.

(Russia--Foreign relations--Asia)  
(Khrushchev, Nikita Sergeevich, 1894\*)  
(Adzhubei, A.)

ZAKHARCHENKO, V., inzh.

New designs of livestock buildings and storehouses with brick  
vaults. Sil'. bud. 11 no. 2:3-10 F '61. (MIRA 14:2)  
(Farm buildings)

ZAKHARCHENKO, V., insp.

New standard designs of cow barns incorporating the over-all mechanization of heavy work. Sil'. bud. 10 no.11:11-13 N '60 (MIRA 13:11)  
(Ukraine---Precast concrete construction) (Dairy barns)  
(Dairy barns)

ZAKHARCHENKO, V.. inzh.

Let's build high-quality livestock buildings. Sil'.bud. 8 no.2:  
15-17 F '58. (MIRA 13:7)

(Farm buildings)

(Precast concrete construction)

ZAKHARCHENKO, V., inzh.

Reconstruction livestock buildings taking into account  
the over-all mechanization of heavy work. Sil'.bud.  
10 no.8:10-11 Ag '60. (MIRA 13:8)  
(Farm buildings)



ZAKHARCHENKO, V., inzh.

Constructing farm buildings without using wooden elements. Sil'.bud.  
10 no.6:14-16 Je '60. (MIRA 13:6)  
(Ukraine--Farm buildings)

ZAKHARCHENKO, V., inzh.

Designs of economical hoghouses for fattening swine. Sil'.bul.  
10 no.2:10-12 F '60. (MIRA 13:5)  
(Swine houses and equipment)

KRAVCHENKO, V.; ZAKHARCHENKO, V., inzh.

Using precast reinforced concrete construction elements in  
constructing farm buildings. Sel'stroi. 9 no.6:5-9 8 '54.  
(MIRA 13:2)

1. Rukovoditel' arkhitekturno-planirovochnoy masterskoy Giproset'-  
stroya USSR (for Kravchenko). 2. "Giproset'stroy" USSR (for  
Zakharchenko).  
(Farm buildings) (Precast concrete construction)

ZAKHARENKO, V.A.

Using carbine for controlling wild oats in wheat fields.

Agrobiologiya no.1:153-155 Ja-F '64

(MIRA 17:8)

1. Sovkhoz "Novo-Aleksandrovskiy", Tselinogradskaya oblast'.

ZAKHARENKO, V. A.: Master Chem Sci (diss) -- "Chemism of the destructive hydrogenation of hydrocarbons in the presence of the catalyst  $WS_2$  + aluminum silicate". Moscow, 1958, published by the Acad Sci USSR. 12 pp (Acad Sci USSR, Inst of Mineral Fuels), 185 copies (KL, No 4, 1959, 121.)

ZAKHARENKO, V.B.; SEDYKH, K.F.

Fauna of water beetles and beetles living near water in the  
Ukhta District, Komi A.S.S.R. Izv.Komi fil.Geog.ob-va SSSR  
no.7:82-87'62. (MIRA 15:12)  
(Ukhta District—Beetles)

ZAKHARCHENKO, Vasilii Dmitriyevich; ANTIPINA, L., red.; MIKHAYLOVSKAYA, N.,  
tekh. red.

[Fifteen unmailed letters] Piatnadtsat' neotpravlennykh pisem.  
Moskva, Izd-vo TsK VLKS: "Molodaia gvardiia," 1961. 26 p.  
(MIRA 15:2)

(United States--Social conditions)  
(Russia--Social conditions)

ZAKHARCHENKO, Vasilii Dmitriyevich; ANTIPINA, L., red.; YEGOROVA, I.,  
tekhn. red.

[Swallows are returning from Africa] Lastochki priletaiut iz  
Afriki. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia," 1962.  
157 p. (MIRA 16:7)

(Mali--Politics and government)  
(Mali--Description and travel)



ZAKHARCHENKO, V.D.; OBRAZTSOV, V.M., akademik, redaktor; DOTSENKO, M.,  
redaktor; MINEVICH, I., tekhnicheskiiy redaktor.

[Engines] Dvyhun; Pid red. V.M.Obrastsova. Pereklad z rosiis'k-  
ho vydannia. Kyiv, Derzhavne vyd-vo tekhnichnoi lit-ry Ukrainy,  
1951. 55 p. (MLRA 8:2)  
(Gas and oil engines)

ZAKHARCHENKO, V.D.; OBRATSOV, V.N., redaktor.

[Motor; internal combustion engines] Motor; o dvigatelakh  
vnutrennego sgoraniia. Pod red. V.N.Obratsova. Iss. 2-o,  
Moskva, Gostekhizdat, 1954. 56 p. (MIRA 7:11D)

ZAKHARCHENKO, Vasilii

Notebook with a blue eye. Sov.foto 20 no.3:20-23 Kr '63.  
(MIRA 13:7)

(Photography)

*ZAKHARCHENKO, VASILIIY DMITRIYEVICH*

BOLKHOVITINOV, Viktor Nikolayevich; BUYANOV, Aleksandr Fedorovich;

ZAKHARCHENKO, Vasiliiy Dmitriyevich; OSTROUMOV, Georgiy Nikolayevich;  
ORLOV, V., red.; MOROZOV, S., red.; PEKELIS, V., red.; YEMOROVA, I.,  
tekhn.red.

[Stories from the history of Russian science and technology]

Rasskazy iz istorii russkoi nauki i tekhniki. Pod obshchei red.

V.Orlova. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia," 1957.

589 p.

(MIRA 11:1)

(Science--History) (Technology--History)

ZAVIARCHENKO, V. F., SKROZKIY, G. V., KURBATOV, L. V., (Sverdlovsk)

"A Contribution to the Faraday and Kerr Effects for the Radio Frequency," paper presented at the International Conference on Physics of Magnetic Phenomena, Sverdlovsk, USSR, 23-31 May 1956

~~ZAKHARCHENKO, V.F.~~  
BULASHEVICH, Yu.P.; ZAKHARCHENKO, V.F.

Potential of a naturally polarized ellipsoidal body. Izv. AN SSSR  
Ser.geofiz. no.10:1174-1181 0 '56. (ML2A 10:1)

1. Ural'skiy filial Akademii nauk SSSR Gorno-geologicheskii institut.  
(Terrestrial electricity) (Ore deposits)

2 ZAKHARCHENKO V. F.

AUTHORS:

Skrotskiy, G.V., Zakharchenko, V. F.

48-9-19/26

TITLE:

A Note on the Theory of the Kerr- and Faraday Effect Obtained with Radio Frequencies (K teorii effektov Kerra i Faradeya na radiochastotakh).

PERIODICAL:

Izvestiya AN SSSR Seriya Fizicheskaya, 1957, Vol. 21, Nr 9, pp- 1297-1301 (USSR)

ABSTRACT:

It is shown here that all relations determining the magnitude of the Kerr- and Faraday effect can be obtained from solutions of the Maxwell equations for a medium, if the boundary conditions are given. The equations for the diffraction indexes are deduced. These coefficients determine the phase velocity of light which is left- and righthanded circularly polarized. The equation for the coefficients of the damping of this wave is deduced. When the electromagnetic wave proceeds in an infinite homogeneous medium in a direction parallel to the vector  $\vec{\Gamma}$  the polarization ellipse turns monotonously.  $\vec{\Gamma}$  denotes the complex vector of gyration. The equation for the rotation angles of the polarization ellipse are deduced. They are functions of the parameters  $\xi$ ,  $\mu$ , and  $\Gamma$ ,  $\mu$  denoting the complex permeability. These three quantities are, generally spoken, frequency functions of the radio-wave field.

Card 1/2

A Note on the Theory of the Kerr- and Faraday Effect Obtained 48-9-19/26  
with Radio Frequencies.

The complex permeability  $\mu$  is a very slowly changing monotonous frequency function in the range of high frequencies. The dispersion formulae for  $\mu$  and  $\epsilon$  can be found on the basis of one or another model of a magnetic substance. In the case of paramagnetic substances, having a spin system, which is responsible for their magnetic properties, an equation for the modification of the transverse part of the high frequency magnetization ( $m_x, n_x$ ) is set up. It is shown that in the case of paramagnetic substances the rotation angles of the polarization ellipse for the normal Kerr effect  $\vartheta_K$  in the vicinity of resonance, even under the most favourable conditions do not rise above a few minutes of angle. In the case of ferromagnetic substances with a good electric conductivity,  $\vartheta_K$  may reach in weak fields a few hundredths of a radiation. In ferromagnetic substances with a great relaxation time a strongly marked resonance of the rotation angle of the polarization ellipse occurs. If the relaxation times are short

( $10^{-8} - 10^{-10}$  sec) the resonance character of the phenomenon is much weaker. There are 2 figures and 4 Slavic references.

ASSOCIATION: Physical-Technical Faculty of the Ural- Polytechnical Institute  
(Fiziko-tekhnicheskiy fakul'tet Ural'skogo politekhnicheskogo instituta)

Card 2/2



AUTHORS:

Poromarev, V.N. and Zakharchenko, V.F.

SOV-132-58-9-9/18

TITLE:

The Utilization of Measurements of the Magnetic Field in Prospecting Pits for the Determination of the Magnetization of Rocks Under Conditions of Their Natural Occurrence (Ispol'zovaniye izmereniy magnitnogo polya v shurfakh dlya opredeleniya namagnichennosti gornykh porod v usloviyakh ikh yestestvennogo zaleganiya)

PERIODICAL:

Razvedka i okhrana nedr, 1958, Nr 9, pp 33-35 (USSR)

ABSTRACT:

The intensity of the magnetization of minerals can be determined by the examination of core samples taken from prospecting pits, but, as the magnetizing component is not evenly distributed, the obtained results will not show the real degree of magnetization. The authors propose a method of calculation of the degree of magnetic intensity, by studying it under the conditions of natural occurrence of the minerals. Prospecting pits and bore holes can be used for this purpose. Analytical and graphical calculations are given in detail. The use of the MP-1 magnetometer is recommended.

Card 1/2

There are 3 graphs and 1 Soviet reference.

S07-132-58-9-8/18

The Utilization of Measurements of the Magnetic Field in Prospecting Pits  
for the Determination of the Magnetization of Rocks Under Conditions of  
Their Natural Occurrence

ASSOCIATION: (UFAN)

1. Geology--USSR 2. Magnetic fields--Measurement 3. Minerals  
--Sampling 4. Geophysical prospecting

Card 2/2

ZAKHARCHENKO V. F.

56-2-36/51

AUTHORS: Stepanov, V. G., Zakharchenko, V. F., Bezel', V. S.

TITLE: Rotating Plasma (O vrashchayushchaya plazma)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958,  
Vol. 34, Nr 2, pp. 512 - 513 (USSR)

ABSTRACT: Starting from the essential characteristics of freezing magnetic lines of force in a plasma it is not difficult to draw conclusions on the possibility of imparting rotating motions to a plasma by means of a rotating magnetic field. In the experimental apparatus of the authors the plasma was stimulated in a glass flask (350 mm height and 60 mm diameter). The tantalum anode was in the upper part of the flask and liquid mercury served as cathode. The rotating magnetic field was originated by two pairs of coils with iron cores at right angles to each other. The mean field strength in the flask was 325 Oersted. First the following was found: With the magnetic field applied and no discharge present the rotating wheel within the flask remained without motion. With discharge present and no magnetic field applied the

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56-2-36/51

Rotating Plasma

rotating wheel also remained motionless. The switching on of the rotating magnetic field with discharge present in the flask set the rotating wheel in motion. With increasing pressure the maximum velocity of rotation of the rotating wheel was reached within shorter periods. A change of the direction of magnetic field caused an intensive slowing down of the rotating wheel with subsequent acceleration to maximum speed. In these experiments the current flowing through the flask was kept constant at 12 A. By means of stroboscopic measurements the authors could determine that the velocity of rotation of the rotating wheel which had become steady was about 50 revolutions per second, the magnetic field rotating with about 50 revolutions per second. The results obtained make it possible to estimate that force which was exercised by the ionized gas in the rotating magnetic field on the rotation wheel. The moment of frictional forces can be neglected here. A gas with a density of about  $10^{-7}$  is in interaction with the rotating wheel; this density is about equal to that of mercury vapors. There are 5 references, 3 of which are Slavic.

Card 2/3

Rotating Plasma

56-2-36/51

ASSOCIATION: Ural Polytechnical Institute  
(Ural'skiy politekhnicheskiy institut)

SUBMITTED: November 4, 1957

AVAILABLE: Library of Congress

1. Plasma-Motion
2. Magnetic fields-Motion

Card 3/3

2 A K H A R C H E N K O , V. F.

24.2/20  
AUTHORS:  
GRANOVSKIY, V.I., LUK'YANOV, S.YU., SPIVAK, G.V. and  
JIROTEBKO, I.G.  
TITLES:  
Report on the Second All-Union Conference on Gas  
Electronics

64702

50V/09-4-9-22/13  
1959, Vol 4, Nr 8,  
pp 1339 - 1358 (UZR)

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 8,  
pp 1339 - 1358 (UZR)

ABSTRACT: The conference was organized by the Academy of Sciences, the  
Ministry of Higher Education and Moscow State University.  
A.A. Il'manov - "Measurement of the Gas Density During  
the Dynamic Operation of a Discharge" (see p 1306 of  
the Journal). A.V. Nedospasov - "The Nature of a Striated  
Positive Column".

V.I. Par' and Yu.M. Rafan - "The Theory of Probes for  
Arbitrary Pressures".

Yu.M. Rafan et al. - "The Positive Column of a Discharge  
in a Diffusion Regime".  
A.V. Kuznetsov - "Influence of the Processes of the  
Ionization of the Negative Ions on Their Concentration  
in the Column".

M.D. Gubrich and L.I. Paschuk - "Anomalous Scattering  
Excitation of Plasma Oscillations and Plasma Resonance".

Yu.L. Klimantovich - "Energy Lost by Charged Particles for  
the Excitation of the Oscillations in Plasma (the Langmuir  
Paradox)" and "The Theory of Non-linear Plasma Oscillations".

I.G. Martinkov and I.G. Mikhalevich - "Dependence of  
the Temperature in the Near-electrode Region of a Pulse  
Discharge on the Material of the Electrodes".

T.A. Maralova and B.M. Klyazmina - "Formation of Light  
Spots on the Anode of a Gas Discharge (see p 1301 of  
the Journal)".

B.A. Metvenko - "Distribution of Binary Mixtures of Inert  
Gases in a d.c. Discharge".

V.G. Stetsko and V.P. Shchurkova - "Some Phenomena  
in a Striated Plasma".

V.A. Stetsko and V.P. Shchurkova - "The Possibility of  
Obtaining Highly Concentrated Plasmas".

G.V. Smirnov and S.M. Boychuk - "Some Character-  
istics of the Discharge in an Ion Pump and in a Magnetic  
Isolation Vacuum Gauge".

Ye.T. Kucherskaya and O.K. Naizenko - "Properties of  
a Discharge with Electron Oscillations in a Magnetic  
Field" (see p 1213 of the Journal).

The paper by L.M. Biberman and B.A. Vukobratovich  
the approximate methods for determining the concentration  
of atoms at the radiation levels.

I.Y. Febel'man and L.A. Vaynshteyn read a paper on  
"A Non-stationary Theory of the Stark Broadening of the  
Spectral Lines in Plasma".

A.A. Moring and S.L. Mandel'shtam - "The Excitation of  
and the Shift of Spectral Lines in a Striated Plasma".

Abstract (English) of the Abstracts of the Proceedings  
Leading to the Excitation of the Molecular Hydrogen in  
a Striated Plasma".

A.A. Nek and M.E. Yashukov - "Production of High  
Temperatures by Means of Spark Discharges".

69445  
S/139/60/000/01/019/041  
E201/E491

24.2120  
AUTHORS:

Stepanov, V.G., Zakharchenko, V.F. and Bezel', V.S.

TITLE:

Motion of a Plasma<sup>21</sup> in a Moving Magnetic Field<sup>21</sup>

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy, Fizika,  
1960, Nr 1, pp 104-114 (USSR)

ABSTRACT:

The authors deal with motion of a charged particle in a rotating magnetic field. It is shown that the hydrodynamic approximation can be used to study motion of ionized gas in a rotating magnetic field at field frequencies much smaller than the Larmor frequency. The theoretical results were checked experimentally on a plasma excited in a vertical glass tube of 330 mm height and 60 mm diameter. A tantalum anode was placed in the upper end of the tube, and liquid mercury at the bottom of the tube served as the cathode (Fig 1). A rotating magnetic field of 325 Oe intensity was produced by two pairs of mutually perpendicular coils with iron cores; the circuit is shown in Fig 2 and the spatial distribution of coils in Fig 3. Inside the tube, the authors placed a light four-winged quartz vane, supported

Card 1/2

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S/139/60/060/01/019/041  
E201/E491

Motion of a Plasma in a Moving Magnetic Field

vertically between a pair of agate bearings. On application of the rotating magnetic field to the plasma the vane rotated in the same direction as the applied magnetic field. This rotation occurred only above a certain critical pressure, which was  $10^{-3}$  mm Hg in the authors' apparatus. The maximum steady-state rate of rotation was 50 rev/sec. From an approximate calculation of the forces acting on the vane, the authors deduced that the whole volume of the gas rotated, like a conducting liquid, in agreement with the theoretical predictions. There are 3 figures and 5 references, 4 of which are Soviet and 1 a translation from English into Russian.

ASSOCIATION: Ural'skiy politekhnicheskii institut imeni S.M.Kirova  
(Ural Polytechnical Institute imeni S.M.Kirov)

SUBMITTED: January 26, 1959  
Card 2/2



ZAKHARCHENKO, V.F.

Theory of boundary effects of neutron geophysics. Izv. AN SSSR.  
geofiz. no.12:1811-1818 D '64. (MIRA 18:3)

1. Institut geofiziki Ural'skogo filiala AN SSSR.

ZAKHARCHENKO, V.F.

Distribution of thermal neutrons, allowing for deceleration, as applicable to pulse-source neutron measurement in geophysics.  
Izv. AN SSSR. Ser. geofiz. no.10:1522-1531 0 '63. (MIRA 16:12)

1. Institut geofiziki Ural'skogo filiala AN SSSR.

S/374/62/000/002/011/019  
D218/D308

AUTHOR:

Zakharchenko, V.P.

TITLE:

On the applicability of approximate methods of neutron-transport theory to the solution of problems in neutron geophysics

Academy of Sciences of the USSR. Ural'skiy filial. Institut geofiziki. Izdaniye 1945. Geofizicheskiy sbornik, no. 3, 17-45

TEXT:

This is a review paper concerned with the application of neutron-transport theory to borehole neutron spectroscopy. The subject matter is discussed under the following headings: (1) definition of the problem with matter; (2) definition of the problem with matter; (3) definition of the problem with matter; (4) definition of the problem with matter; (5) slowing down density, (6) the age theory.

(5) slowing down density, (6) the age theory

Card 1/2

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963510013-2

S/874/62/000/002/001/002

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963510013-2"

ZAKHARENKOV, V.F.; KAYDANOVSKIY, N.L.; PARIYSKIY, Yu.N.; PROZOROV, V.A.

Observations of discrete radio sources at 3.2 cm. wave length  
at Pulkovo. Astron.zhur. 40 no.2:216-222 Mr-Apr '63. (MIRA 16:3)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.  
(Radio astronomy)

ZAKHARCHENKO, V.F.

Some problems in the theory of neutron logging by the use of a pulse neutron generator. Izv.AN SSSR,Ser.geofiz. no.6:847-854 Je '61.

(MIRA 14:5)

1. Akademiya nauk SSSR, Ural'skiy filial, Institut geofiziki.  
(Radioactive prospecting) (Neutrons)

ПОНОМАРЕВ, В.Н.; ЗАХАРЧЕНКО, В.Ф.

Determining the azimuth of a magnetized ball. Prikl. geofiz. no.27:  
171-174 '60. (MIRA 13:12)

(Prospecting—Geophysical methods) (Magnetic fields)  
(Azimuth)

STEPANOV, V.G.; ZAKHARCHENKO, V.F.; BEZEL', V.S.

Movement of a plasma in a moving magnetic field. Izv. vuz. ucheb.  
zav.; fiz. no. 1:104-114 '60. (MIRA 13:12)

1.Ural'skiy politekhnicheskiy institut imeni S.M. Kirova.  
(Plasma (Ionized gases)) (Magnetic fields)



ZAKHARCHENKO, V.G., inzhener.

Using telescoping towers to insulate ladders while working on  
35-220 k.v. power lines. Energetik 5 no.3:25-26 Kr '57.  
(MIRA 10:3)

(Electric lines)

PONOMAREV, V.N.; ZAKHARCHENKO, V.F.

Using measurements of borehole magnetic fields for determining  
the magnetization of rocks in places of their occurrence,  
Razved i okh. nedr 23 no.9:33-35 S '58. (MIRA 11:12)

1. Ural'skiy filial AN SSSR.  
(Rocks--Magnetic properties)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963510013-2

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963510013-2"

*Zakharchenko V. I.*  
USSR/Pharmacology. Toxicology. Toxicology

V

Abs Jour : Ref Zhur-Biol., No 8, 1958, 37713

Author : ~~Zakharchenko V. I.~~

Inst : Omsk Medical Institute

Title : Reactivity of Tissue Elements of the Central and Peripheral Divisions of the Nervous System of Animals in Chronic Tetraethyl Lead Intoxication. (Reaktivnost' tkanovykh elementov tsentral'novo i perifericheskovo otделov nervnoy sistemy zhivotnykh pri khronicheskom otravlenii tertae-tilsvintsom).

Orig Pub : Tr. Omskovo Med. in-ta, 1957, No 23, 148-155

Abstract : Histological investigations of the central nervous system at the spot where the poison was administered to rats and guinea pigs who for periods of 21 to 45 days were subjected to intoxication by tetraethyl lead revealed that the

Card 1/2

ZAKHARCHENKO, V.I., assistant

Morphological changes in some sections of the central and peripheral nervous system of white rats from small doses of tetraethyl lead poisoning. Trudy OMI no.25:205-210 '59. (MIRA 14:10)

1. Iz kafedry gistologii Omskogo meditsinskogo instituta imeni Kalinina, zav. kafedroy prof. A.A.Nikiforova.  
(LEAD-POISONING)

(NERVOUS SYSTEM—DEGENERATION AND REGENERATION)

ZAKHARCHENKO, V. I., Cand Med Sci (diss) -- "Histological changes in certain portions of the central nervous system and skin in chronic poisoning with tetraethyl lead (TES)". Omsk, 1959. 14 pp (Min Health RSFSR, Omsk State Med Inst Im M. I. Kalinin), 200 copies (KL, No 10, 1960, 136)

ZAKHARCHEENKO, V.N.; LUNINA, M.A.

Rotary viscometer for measurements at low tangential stresses.  
Zhur. fiz. khim. 39 no. 1:253-254 Ja '65 (MIRA 19:1)

1. Khimiko-tehnologicheskii institut imeni D.I. Mendeleeva,  
Moskva. Submitted January 23, 1964.

ZAKHARCHENKO, V. N., gornyy inzh.; TUMAKOV, V. A., gornyy inzh.;  
PYS', F. N., gornyy inzh.

Working thin ore bodies with slim inclined boreholes. Gor.  
zhur. no.11:36-41 N '62. (MIRA 15:10)

1. Sredneaziatskiy gosudarstvennyy institut tsvetnykh metallov,  
Almalyk, Tashkentskaya oblast'.

(Kurgashinkan region--Boring)



Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6,  
p 73 (USSR) 14-57-6-12204

AUTHOR: Zakharchenko, V. T.

TITLE: Adding of New Land and Improvement of Reclamation  
Techniques in the Irrigated Lands of the Turkmen SSR  
(Osvoeniye novykh i uluchsheniye meliorativnogo  
sostoyaniya oroshayemykh zemel' v Turkmenskoy SSR)

PERIODICAL: Tr. 8-y ob'yedin. sessii AN TurkmSSR po vopr. str-va  
Karakumsk. kanala i dal'neysh. razvitiya khlopkovodstva  
v Turkmenistane, 1955, Ashkhabad, 1956, pp 28-56

ABSTRACT: The Amu-Dar'ya and Murgab regions are anticipating an  
increase in the amount of irrigated land in the years  
to come. Reclamation techniques suitable for these  
regions are discussed in this article. The author  
proposes a number of essential reclamation measures,  
emphasizing specially construction of collector

Card 1/2

14-57-6-12204

. Adding of New Land and Improvement (Cont.)

drainage nets which will greatly improve the land. In connection with this he states that water collection and distribution systems should be improved. He criticizes the republic's scientific water program, and declares that the first order of business should be the study of water loss in irrigation ditches and the methods for its prevention, the building and utilization of collecting drainage nets suitable to local conditions, and the prevention of salting the fields with irrigation waters.

Card 2/2

G. D.

ACC NR: AR7000941

SOURCE CODE: UR/0273/66/000/010/0036/0036

AUTHOR: Isayev, A. I.; Zakharchenko, V. V.

TITLE: The role of the injector in the organization of the process of fuel feeding

SOURCE: Ref. zh. Dvigateli vnutrennego sgoraniya, Abs. 10.39.265

REF SOURCE: Tr. Permsk. s.-kh. in-t, no. 34, 1966, 17-39

TOPIC TAGS: fuel, ~~digital computer~~, fuel injector, *FUEL INJECTION*

ABSTRACT: A description is given of a study to determine the influence of the individual elements of an injector on the course of the process of fuel feeding. A peg injector was selected for the investigations, which were carried out mainly by calculation on a "Strela" digital computer. [Translation of abstract]

[GC]

SUB CODE: 21/

Card 1/1

UDC: 621.436.038.8

KAVETSKIY, N.Ye., prof.; GRINBERG, Ya.M., dotsent; ZAKHARCHENKO, V.V.;  
KUL'NEVICH, N.G.

Some results of sanatorium and health resort therapy in patients  
with cardiovascular diseases under the climatic conditions of  
the middle Volga Valley. Kaz.med. zhur. no.1:16-18 Ja-1966.

(MIRA 16:8)

1. Fakul'tetskaya terapevticheskaya klinika (zav. - prof. N.Ye.  
Kavetskiy) Kuybyshevskogo meditsinskogo instituta.

(CARDIOVASCULAR SYSTEM—DISEASES)

(KUYBYSHEV PROVINCE—HEALTH RESORTS, WATERING PLACES, ETC.)

ZAKHARCHENKO, V.Ye., inzh.

Gunite operations on reinforced concrete reservoirs. 9trci.  
truboprov. 6 no.5:20-22 My '61. (MIRA 14:7)  
(Gunite)

AFANAS'YEV, Yakov Vasil'yevich, prepodavatel'; ZAKHARCHENKO, Zoya  
Ivanovna, prepodavatel'; OSTAPENKO, Nikolay Nikolayevich,  
sasluzhenyy uchitel' professional'no-tekhnicheskogo  
obrazovaniya RSFSR; BILINSKIY, M.Ya., red.; SUSHKEVICH, V.I.,  
tekhn.red.

[Manual on the general technology of metals] Metodicheskie  
posobie po obshchei tekhnologii metallov. Moskva, Vses.uchebno-  
pedagog.izd-vo Trudreservizdat, 1958. 209 p.

(HIRA 14:1)

(Metals)

(Metalwork)

PHASE I BOOK EXPLOITATION

1202

Afanas'yev, Yakov Vasil'yevich; Zakharchenko, Zoya Ivanovna; Ostapenko, Nikolay Nikolayevich

Metodicheskoye posobiye po obshchey tekhnologii metallov (Manual of Methodology for the [teaching of] General Technology of Metals) Moscow, Trudrezervizdat, 1958. 209 p. 10,000 copies printed.

Ed.: Bilinskiy, M. Ya.; Tech. Ed.: Sushkevich, V. I.

**PURPOSE:** This book is intended for teachers giving a course of instruction in the technology of metals.

**COVERAGE:** The book systematically outlines material to be covered. The suggested manner of presentation is intended only as a guide, the instructor being encouraged to make changes wherever they seem desirable. Topics covered include: properties of metals, production of iron and steel, heat treatment, nonferrous metals, nonmetallic materials, casting, forming, welding, soldering, machining, and bench work. No personalities are mentioned. There are 22 references, all Soviet.

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AVAILABLE: Library of Congress

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2-24-59

ZAKHARCHENYA, B. P.

Excitons in crystals of cuprous oxide. E. P. Gross and B. P. Zakharchenya. *Doklady Akad. Nauk S.S.S.R.* 90, 745-6 (1953) (Engl. translation issued as *U.S. Atomic Energy Comm. NSF-tr-122*, 6 pp. (1953)).--Previous work (C.A. 46, 9412a) on the absorption of  $\text{Cu}_2\text{O}$  crystals has been continued with plates about 20  $\mu$  thick. At a temp. of  $-196^\circ$  the H-like series of absorption lines previously noted was considerably weakened and the min. in the continuum beyond the series limit was strengthened. Beyond this min. appeared a new H-like series of narrow absorption lines converging, in the direction of shorter waves, to a limit at 5104  $\text{\AA}$ ., beyond which continuous absorption was observed. The wave nos. of the new series are given by:  $\nu_h = 18,507 - 1248/h^2$ , in which  $h = 2, 3, 4, \dots$ . The difference between the limits of the 2 series is 0.131 e.v., which coincides, within exptl. error, with the energy of the infrared absorption band of  $\text{Cu}_2\text{O}$ . C. C. Klett

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AF  
11-10-64

ZAKHARCHENYA, B. P.

USSR/Physics - Low Temperatures,  
Cuprous Oxide

11 Sep 53

"Excitons in Cuprous Oxide Crystal at Temperature of Liquid Helium (4.2°K)," Ye. F. Gross, Corr Mem Acad Sci USSR, B. P. Zakharchenya and N. M. Reynov, Leningrad Phys-Tech Inst, Acad Sci USSR

DAN ESSR, Vol 92, No 2, pp 265-267

Continue previous investigations of spectrum of  $Cu_2O$  (Gross et al, DAN 84, Nos 2, 3, (1952), 90, No 5, (1953)) using still lower temps and equipment of higher disperison. Absorption lines of H-like series,

269T107

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ascribed to exciton spectrum, narrowed and shifted violetwards. Results are tabulated. Rec 9 Jul 53.

USER/ hysier Senate, 1960-1961

Card :

Authors : W. H. R. ... ..

Title :

Periodical :

Abstract :

Institution : ... ..

Submitted : May 1, 1961

ZAKHAROVANA, B. P.

12/1/54

Card 1 of 1

Authors : Gross, B. P. Memo. Berest. of Acad. of Sc. USSR, Zakharcheva, B. P.

Title : Stark effect in the spectrum of cerous oxide crystals placed in a strong heterogeneous electric field.

Periodical : Dokl. AN SSSR, 97, Ed. 2, 221 - 223, July 1954

Abstract : The article deals with the Stark effect as observed on the spectrum of cerous oxide crystals placed in a strong heterogeneous electric field. The Stark effect is observed in the spectrum of cerous oxide crystals placed in a strong heterogeneous electric field. The Stark effect is observed in the spectrum of cerous oxide crystals placed in a strong heterogeneous electric field.

Institution : Acad. of Sc. USSR, The Physico-Techn. Institute, Leningrad

Submitted : June 7, 1954

USSR/Physics - Spectral analysis

Submitted : ...



*ZAKHARCHENYA, B. P.*

Authors : Gross, E. F., memb. corresp. of the Acad. of Sps. of the USSR, ...

Institution : Leningrad Physico-Technical Institute of the Acad. of Sps. of the USSR

Submitted : ...

ZAKHARCHENYA, B.P.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1982  
 AUTHOR GROSS, E.F., ZACHARCHENJA, B.P.  
 TITLE The Linear and the Quadratic ZEEMAN Effect and the Diamagnetism  
 of the Exiton of Cuprous Oxide Crystals.  
 PERIODICAL Dokl. Akad. Nauk 111, fasc. 3, 564-567 (1956)  
 Issued: 1 / 1957

One of the most interesting objects for the investigation of the excitonlike absorption of light are cuprous oxide crystals. In thin  $\text{Cu}_2\text{O}$ -plates two series of absorption lines could be observed at the temperature of liquid nitrogen: a yellow and a green series, the frequencies of which duly satisfy the series relation of hydrogenlike atoms. The first line ( $n = 1$ ) of the yellow series deviates considerably from the hydrogenlike relation. If the crystal is cooled down to  $1,3^\circ \text{K}$  up to 10 terms of the yellow series could be observed. In  $\text{Cu}_2\text{O}$ -crystals the exciton can probably be represented, at least at high excited states, by MOTT'S model, i.e. the exciton can be considered as a system consisting in a definite manner of an electron and a hole. The radius of the exciton orbit is enlarged to the  $\epsilon_0$ -fold of the orbit of an isolated atom, where  $\epsilon_0$  is the dielectricity constant of the medium. Because of the large dimensions of the exciton the Stark-effect on the lines of exciton absorption could be observed under the effect of comparatively small fields applied to the crystal.

In the case of  $\text{Cu}_2\text{O}$ -plates of 100 micron thickness the authors were able to make the following observations at  $1,3^\circ \text{K}$  by using a magnet for 30.000 Oersted:

Dokl.Akad.Nauk 111, fasc.3, 564-567 (1956) CARD 2 / 2

PA - 1982

The first term of the yellow exciton series splits up into a triplet on a magnetic field, which field as usual consists of a not displaced line in the  $\pi$ -component and of a doublet in the  $\sigma$ -component. The considerable narrowing of the lines at 1,3° K and the use of a spectrograph with high dispersion permitted the observation of the ZEEMAN splitting up not only in the case of the first narrow line with  $n = 1$ , but also in the case of the other terms of the series. The lines  $n = 3, 4, 5$  split up in the magnetic field into doublets, and these doublets were observed on the occasion of investigations of polarization in the case of  $\pi$ - and also of  $\sigma$ -components. On this occasion the components of the doublets are identical in both components. However, it is possible that ZEEMAN'S splitting up furnishes a quartet (which is not dissolvable) the  $\pi$ - and  $\sigma$ -components of which are very close together. Furthermore, the terms of the series which was split up in the magnetic field shift towards shorter wavelengths. Diamagnetic shift in the exciton spectrum permits the determination of the exciton radius, and at  $n = 5$  the value  $r_{ex} = 200 \text{ \AA}$  is found. By means of MOTT'S model  $r_{ex} = 280 \text{ \AA}$  is found for the analogous quantity, which may be described as good agreement. Thus the quasiparticle exciton actually exists in a solid with the properties of an atomic system.

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TITLE:

The Diamagnetic Zeeman Effect and the Exiton Structure in Cuprous Oxide Crystal (Diamagnitnyy effekt Zeyemana i struktura eksitona v kristalle zakisi medi)

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ABSTRACT

In the case of a number of crystals narrow lines and absorption bands are observed at the edge of the basic absorption on the side of long waves. The investigation carried out here intends to prove that these narrow lines and bands are caused by excitons and not by an "admixture" center. This investigation is connected with the proof of the existence of the existence of exciton-quasiparticles, which is characteristic of the crystalline state. The author showed already in Zhurnal Tekhn.Fiz., 1956, Vol. 26, p 700 that the Zeeman effect is of a peculiar character the lines of the yellow  $\text{Cu}_2\text{O}$  -series  $N=3,4,5,6$ . This Zeeman effect can be used for the purpose of proving the aforementioned existence. Further investigations showed that this effect is much more complicated, namely: the observed splitting-up of the lines  $n=3,4,5,6$  of the yellow exciton series is not caused by the ordinary linear Zeeman effect as was originally assumed by the author, but is connected with the diamagnetic quadratic Zeeman effect. It is shown that with one and the same  $n$ , but different azimuth quantum numbers  $l$  orbital magnetic quantum numbers  $m_l$  somewhat different diamagnetic displace-

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